

AMENDMENTS TO THE CLAIMS

1. (currently amended) ~~Method for the production of dual-layer slabs comprising a first layer of conglomerate formed from a mix comprising a granular material, a filler and a hardening resin and a second layer, or rear layer, formed from a mix comprising a hardening resin which is identical to, or compatible with, that forming said first layer, and a granular material of a light weight, which comprises the following steps:~~

A method of producing dual-layer slabs, the method comprising the steps of:

(a) preparing a first mix comprising a first hardening resin, a first filler, and a first granular material for forming the visible side of a dual-layer slab; preparation of a mix consisting of a hardening resin and a granular material intended to form the visible side of the final slab article;

(b) depositing a thin layer of the mix to form a first layer on a first support, the first support comprising one of a rubber material and elastic material, the first support being lined with a separating material; deposition of the mix in the form of a thin layer referred to below as first layer on a support consisting of rubber or similar elastic material or first rubber sheet lined with a separating material;

(c) depositing a web of continuous glass filaments on an upper surface of the first layer, the web of continuous glass filaments being pre-impregnated with one of the first hardening resin and a compatible resin; deposition, on the free surface of the first layer, of a web of continuous glass filaments pre-impregnated with a hardening resin identical to, or compatible with, that forming the mix of said first layer;

(d) depositing a second mix comprising a second filler, a second granular material, and one of the first hardening resin and a compatible resin on an upper surface of the web to form a second layer, the second granular material being a light weight granular material, the one of the same hardening resin used in the mix and a compatible resin being present in the second mix with a volumetric percentage substantially equal to a volumetric percentage of the hardening resin in the first mix; deposition, on top of said web, of a layer, referred to below as second layer of a mix formed by a hardening resin having a nature identical to, or compatible with, that present in said first layer, by a filler and by a light granular material, the said hardening resin being present in the mix with a volumetric percentage substantially equal to that present in said first layer;

(e) applying a second support onto an upper surface of the second layer, the second support comprising a rubber material and elastic material, the second support being lined with a separating material; application, on top of the free surface of said second layer, of a second sheet of rubber or elastic material lined with separating material;

(f) vacuum compaction by means of application of a pressure on top of said second support rubber sheet and simultaneous application of a vibratory movement of predetermined frequency;

(g) hardening of the hardening resin by means of the action of heat and/or a catalyst;

(h) finishing of the resultant slab article dual-layer slab;

wherein a filler the first and second filler comprise a fine powder in the form of a fine powder is added to said mixes.

2. (currently amended) Method according to Claim 1, characterized in that wherein said light granular material present in the second mix of said second layer is an expanded inorganic material with a substantially spheroidal form, the granules having a size of between 0.1 and 6.0 mm.

3. (currently amended) Method according to Claim 2, characterized in that wherein said light granular material is chosen from expanded glass, expanded clay or other expanded inorganic materials such as alumina.

4. (currently amended) Method according to Claim 1, characterized in that said wherein the first hardening resin is preferably comprises an epoxy resin or a polyester resin.

5. (currently amended) Method according to Claim 4, characterized in that wherein an organofunctional silane is added to the polyester resin.

6. (currently amended) Method according to Claim 1, characterized in that said wherein the first granular material present in said first layer, intended to form the visible side of the resultant slab or board article, is chosen from natural stone materials such as marble, granite, porphyry, quartz, etc. and man-made materials such as ceramic materials or other materials of lithoid appearance, such as glass, silicon, shells, metals, etc.

7. (currently amended) Method according to Claim 1, characterized in that said wherein the first and second filler is chosen from comprises quartz or carbonate powders.

8. (currently amended) Method according to Claim 7, characterized in that said wherein said quartz is in the form of powdered cristobalite.

9. (withdrawn) Dual-layer slab article obtained by the method according to any of the claim 1.